

II. Historic Context

A. Exploration and Frontier Settlement: 1630 to 1730

The first attempt at permanent European settlement in Delaware was the Dutch whaling/trading station "Swanendael" ("valley of the swans"), which was founded in 1631 by patroons of the Dutch West Indies Company. Located near the modern town of Lewes, Swanendael was the first semi-private venture sanctioned by the Dutch West Indies Company, and only its second attempt at settlement in over twenty years of exploration and trade on the Delaware River. Unlike the Hudson River area, where the Dutch West Indies Company had established a number of permanent, year-round settlements, in its earliest days, the Delaware was administered as a seasonal interest, with intermittent visits from the Company's trade center, Fort Amsterdam, on present-day Manhattan. Swanendael's individual sponsors hoped that their year-round settlement on the Delaware, or "South River" as it was then called, would stimulate the Company to a greater interest in the entire region (Weslager 1987, 1961).

The patroons' settlement proved to be a tragic failure. In 1632, the Swanendael settlers were massacred by members of the local "Ciconisin," tribe. The following year, the Dutch reoccupied the site, but failed in their efforts to establish a whaling operation. The Company soon reverted to its prior use of the Delaware region as a catchment area for the lucrative fur trade. Several times a year, the Company's ships would sail into the Delaware to trade with the Minquas, or "Susquehannock," who were a powerful inland tribe that was linguistically and culturally distinct from the local Native American groups. Because they enjoyed a virtual monopoly in this trade, initially, the Dutch saw little reason for an increased investment in the Delaware or another attempt at a year-round presence (Weslager 1961).

By the late 1630's, the Dutch West Indies Company's ambivalence towards the South River was rewarded by challenges from other European interests, specifically English and Swedish. The first serious incursion occurred in 1634, when an English ship, led by Thomas Yong, entered the river. During their foray into the Delaware, the English crew mapped much of upper regions of the river, and briefly occupied Fort Nassau, the Dutch seasonal trading post (then vacant) on the east side of the river (Williams 1985; Weslager 1961).

In 1638, Peter Minuit, the former governor of the Dutch West Indies Company, erected the first Swedish settlement on the Delaware. Shrewdly purchasing land on the west side of the river--nearest the Minquas' trade routes--he directed the colonists to erect a fort at the confluence of the Christina and Brandywine Rivers, within present-day Wilmington (Weslager 1987). Because of its location, "Fort Christina" posed an immediate threat to the Dutch monopoly on trade with the inland native groups. In defense of their interests, the Dutch made a show of aggression towards the Swedes. But Minuit, who had extensive knowledge both of the Delaware region and of the Dutch Company's activities within it, was not perturbed, and the Swedes took up residence on the Delaware (Becker 1999; Gehring 1995; Weslager 1987).

The inhabitants of "New Sweden" were actually a combination of Dutch, Swedish, and Finnish settlers. Unlike the Dutch, who used the Delaware only for trade with the Minquas, the Swedes intended a more intensive occupation of the region. A motley crew of farmers, soldiers, and

commuted prisoners, the settlers of “New Sweden” hoped to supplement their activities in the fur trade with cash crops (such as tobacco and wine) and subsistence farming (Dahlgren 1995; Ordahl-Kupperman 1995).

By the late 1640s, the Swedish settlers were ensconced on the Delaware. Several expeditions had brought additional settlers to the valley, and “New Sweden” was being administered by a Swedish noble named Johan Printz, whose palisaded trade post was located south of present-day Philadelphia. Parceled out on small, riverfront plots that they had purchased from the Lenape—who had fled to the eastern shore of the river following conflicts with the more powerful Minquas—the Swedes outnumbered the Dutch on the Delaware by a margin of 7 to 1 (Gehring 1995; Williams 1995). Their small farms were engaged in a variety of agricultural pursuits, ranging from livestock to orchards, tobacco, and hemp (Catts and Kellogg 2000).

Despite its geographic advantages, its impressive recruitment of settlers, and its commitment to a wider variety of activities in the area, New Sweden was never able to displace the Dutch trade cartel as the primary European agent in the fur trade on the Delaware. This was primarily because the Swedish colonists lacked access to the most crucial element in the fur trade: a steady supply of European trade goods. Unlike the Dutch, who maintained a continuous flow of blankets, beads, and hatchets from their storehouses at Fort Amsterdam, New Sweden was infrequently provisioned by its continental backers. Finding the Swedish traders empty-handed, the Susquehannock continued to favor the Dutch at Fort Nassau until well into the 1660’s (Gehring 1995; Weslager 1987).

Following the appointment of Peter Stuyvesant to the directorship of the Dutch East Indies Company in 1647, the Company began a slow shift in its policy towards its use of the Delaware. In 1648, Stuyvesant ordered his Fort Nassau contingent to erect a second fort, this one on the west side of the Delaware, at the mouth of the Schuylkill (within present-day Philadelphia). Next, he met with the Lenape to re-affirm the Dutch Company’s settlement rights in areas to the south that were then occupied by New Sweden. After receiving assurances from the Lenape, Stuyvesant funneled soldiers and settlers from the northern forts (Nassau and Beversreede) to a new, much larger fort at present-day New Castle.

The Swedes quickly retaliated against this invigorated Dutch interest in the Delaware. In a bloodless maneuver, they seized the new Dutch fort, called “Fort Casimir,” and renamed it “Fort Trinity.” The Swedish occupation of the Dutch fort was brief, though. In 1655, Stuyvesant returned to the Delaware with a force of seven armed ships and over 300 men. Recapturing Fort Casimir, the Dutch force went on to take the Swede’s Fort Christina, to the north, effectively bringing “New Sweden” to an end. Since the Swedish settlers living on the Delaware offered no resistance to the invasion, they were allowed to remain on their farms along the river (Weslager 1987).

Just two years after the Dutch West Indies Company reclaimed its rivers from the Swedes, the cartel was dissolved, and “New Amstel,” the town that had grown up around Fort Casimir, was turned over to the city of Amsterdam. However, very little changed on the Delaware until 1664, when Charles II, King of England, granted all lands between the Connecticut and Delaware Rivers to his younger brother, James, Duke of York. Just as the Dutch had done a decade before,

England claimed the lands occupied by the Swedes and Dutch on the Delaware by right of prior discovery. The crown asserted that John Cabot's "discovery" of the Northeast coast in 1497 superseded the Dutch claim to the Delaware, which was based on Henry Hudson's "discovery" in 1609.

Acting to solidify his grant, James sent a fleet of 4 ships and 450 men to seize New Amsterdam, New Amstel, and all lands held by the Dutch in the Northeast. After New Amsterdam was subdued, Sir Robert Carr sailed into the Delaware and captured both New Amstel and the southern Dutch trading post on the "Hoerenkil" (the original site of Swanendael). Carr's men killed four Dutch soldiers at Fort Casimir and pillaged both of the Dutch trading posts, but once again, the settlers were permitted to remain on the river, unmolested, in exchange for their allegiance. Except for a brief reoccupation by the Dutch in 1674, English sovereignty of the three counties of modern Delaware went uncontested until the American Revolution.

When the English assumed the colonial mantle in the late 1660's, modern-day New Castle County was a melting pot of Dutch, Swedish, English, and Finns. The settlers were primarily farmers and tradesman, settled on small tracts of land fronting the Delaware river. The fur trade was on the wane, and, following the dissolution of the Susquehannock around 1664, the Lenape only briefly reoccupied their ancestral lands in the interior of the Delaware region and southern Pennsylvania before moving north and west, away from European settlement (Becker 1995).

In 1682, Sussex, Kent, and New Castle, the three "lower counties" of Delaware, were conveyed to William Penn and annexed to Pennsylvania. Under Penn's directorship, a flood of English, Welsh, Scottish, and Scots-Irish settlers entered the lower counties. Dutch, Swedish, and Finnish farmers gradually began to move inland, clearing new tracts along the tributaries of the Delaware (Munroe 1978; Hoffecker 1977; Bridenbaugh 1976; Scharf 1888). By 1683, all of Penn's six counties were at least partially cultivated, and the combined regional population exceeded 4000 persons (Myers 1912).

Accompanying this population shift was a shift in the economic base of the region. As the English Empire integrated the Delaware valley more fully into its own vast economic network, area farmers shifted from primarily subsistence activities to market-oriented agriculture. The principal Swedish/Dutch grains (rye and barley) were replaced by corn and English wheat. Even tobacco, which had been the region's cash crop for several decades, was eclipsed by an emerging market demand for wheat (Pursell 1958).

Throughout this period, waterways provided the primary mode of transportation. Since most farms were located adjacent to streams, farmers were able to ship their grain directly to small milling facilities that were located on the tributary rivers and creeks throughout the valley. Two of the earliest such stations were located in New Castle (1658), and along the Red Clay Creek (1679). After milling, wheat flour was transported to Philadelphia or shipped directly to markets in the West Indies, southern Europe, or other parts of North America (Catts and Kellogg 2000: 10; Walzer 1972). Farms remained wholly dependent upon water-based transportation until the first quarter of the 18th century, when overland trade routes first began to emerge across the region. As late as 1730, it could be said that, "over one half of the colony's farmers were located within a half-day's journey (eight miles)" of a gristmill or shipping wharf (Walzer 1972: 163).

During the early years of Penn's proprietorship, he established a system of "hundreds," which were clusters of farms roughly equivalent to townships in other states (Siders et al. 1991: 6). Within the hundreds, lands were sold in parcels averaging 200-299 acres in size. Farmhouses were usually located on high, well-drained soil, in proximity to a fresh water source (either a spring or brook). Structures were typically earth-fast, log or wood-framed, with a small minority of brick structures in urban areas. Land clearing on farms was minimal, with small lots typically located close to the house and outbuildings, while the majority of the property was kept in wood lot (De Cunzo and Catts 1990: 36-40).

Starting in the early 1700's, population and development pressures abated and the Delaware Valley entered a period of minimal growth. In the wake of the first 35 years of English colonization, Philadelphia had emerged as the primary economic, political, and cultural center of a broad "hinterland" stretching west to Lancaster, north to the Lehigh Valley, east to southern New Jersey, and south to include all of modern Delaware (Lemon 1967; Walzer 1972).

While New Castle, Kent and Sussex Counties were inextricably linked to Philadelphia's markets, political and cultural ties between the southern and northern counties were strained. For years, the southern counties had bemoaned their lack of a central judicial facility, while the northern counties (Philadelphia, Chester, and Bucks) resented the control that the less populous lower counties exercised over the General Assembly. In 1704, a compromise was reached, and New Castle, Kent and Sussex were permitted to sever their political tie to the other Pennsylvania counties. The town of New Castle--which had been the regional hub during the first decade of England's rule--became the political center of the "lower counties," and the seat of the new region's General Assembly (Munroe 1978).

B. Intensified and Durable Occupation: 1730 to 1770

Most discussions of 18th century urban development in Delaware and Southeastern Pennsylvania draw on the seminal work of geographer James T. Lemon (1967). Advocating a central-place model of urban development for Philadelphia and its "hinterland," Lemon defined a hierarchy of urban "types" to characterize the variety of communities that emerged across the region from the late 1600s to 1800. Based on economic and population trends, he divided this timespan into five periods: 1652-1680, 1681-1700, 1701-1729, 1730-1770, and 1766-1800. Since the bulk of his discussion deals with developments that took place after the 18th century, we have not used it as a reference in the preceding section.

As noted above, the first quarter of the 18th century witnessed an increase in the settlement of inland areas and an attendant growth in the network of connecting roads. To a great extent, the period 1730-1770 represented an intensification of this trend, driven by a second influx of immigration. Farms emerged across the interior, extending Philadelphia's farming hinterland across northern Delaware and into Maryland (Lemon 1967). Because of its excellent soils and access to markets, New Castle County evolved into a commercial farm community, characterized by its growing affluence and the numbers of artisans, professionals and merchants in its population (Main 1973).

During the middle of the 18th century, “hamlets” began to emerge at transportation junctures. The largest of these communities had grown from early mill stations along waterways and were typically located at a point where a major road crossed a tributary stream. The fast-flowing Brandywine River (which runs to the southwest of the project area), boasted over 8 large commercial mills by the 1770’s (Cooper 1983: 31-32). Connected to the interior farms by a nexus of new roads, similar mill stations in Wilmington and the surrounding area drew grain from as far away as Maryland and southeastern Pennsylvania (Lemon 1967).

Accompanying the growth and spread of the internal road system, hamlets also emerged at major road crossings. Generally comprised of no more than a handful of dwellings, these marginal communities thrived because they offered necessary services to travelers in remote areas. Typically, they centered around taverns and blacksmith/wheelwright shops (Lemon 1967).

The changes that took place in the economy and settlement pattern of New Castle County during this period was driven by a wave of English and Scots-Irish immigrants who arrived in the region between 1725 and 1755. Most of these immigrants were indentured servants, contracted to local farmers for a period of 3 to 7 years of service (Munroe 1978: 196). In addition to these laborers, some Delaware farmers also owned African slaves (Catts and Kellogg 2000: 12). By 1740, the county’s population had ballooned to 6,000 people, 80-90% of whom were involved in some form of agriculture (De Cunzo and Catts 1990: 42; Egnal 1975).

Farm practices of the period took the form of mixed husbandry, typically combining grain cultivation with livestock raising (Bidwell and Falconer 1941: 84). Land use is described as “extensive,” meaning that crop fields were not rotated, nor fertilized with manure or lime. When soils became exhausted, new areas were opened up for cultivation. Though soil conservation and crop rotation were practiced in Europe at this time, Delaware farmers clung to older techniques because they lacked adequate labor to clear areas for rotation and also because the market demand for wheat discouraged the use of other crops to replenish fields (Lemon 1972: 179).

In the mid-1700’s, the average size of a New Castle County farm was about 200 acres. By extrapolating from a study of farms in southeastern Pennsylvania (Lemon 1972: 167), we can estimate land-use on an average local farm. Typically, 40 acres (20%) were sown in wheat; 22 acres (11%) in meadow for hay; 32 acres (16%) for pasture; and 14 acres (7%) for flax, hemp, roots, other vegetables, fruits, and tobacco. The remaining acreage - roughly half of the total - was left to woodlot.

The average farmstead occupied a little less than half an acre and was comprised of a domestic structure as well as six to eight outbuildings. Outbuilding types included: detached kitchens, corn cribs, stables, meat or smokehouses, barns, and tenant houses (in descending order of appearance). Domestic-oriented outbuildings and gardens were located in proximity to the house, while agricultural buildings were closer to fields. Gardens contained the draw-well, and were fenced to keep out farm animals (Herman et al. 1989: 63-65).

Farmhouses of the period averaged sixteen to twenty feet square. Typical construction was log or frame (or stone depending on locality) on a one-room plan, and either one or two stories high. The ground-floor room was accessed directly from the outside, with windows on either side of

the entrance as well as a window in the gable opposite the chimney. If it was a two-story structure, the second floor was usually accessed by a spiral staircase in the corner adjacent to the hearth. This "hall-plan" style house afforded scant privacy within the family and little separation between it and the outside world. While New Castle farmsteads typically had either a separate or adjoining kitchen, most domestic and social interaction took place within the ground-floor room of the main house (Herman et al. 1989: 14-19).

C. Early Industrialization: 1770 to 1830

During the late 18th and early 19th centuries, the Piedmont region of northern New Castle county remained predominately agricultural in character. Directly to the south and east of the project area, in the valley communities of Brandywine Village and Wilmington, respectively, nascent industries emerged and began to re-shape the economic and social landscape of the lower Brandywine and Christina Rivers (Catts and Kellogg 2000: 14; Blume et al. 1990: 14, 44).

These shifts in the region's mode of production occurred against a backdrop of fluctuating agricultural markets and periods of conflict with England over taxation and trade-restrictions against American farm-products in the British West Indies. Both the Revolutionary War and the War of 1812 resulted in boycotts of American goods and blockades of American shipping centers by British forces (Lindstrom 1978: 20). These political and economic conflicts resulted in profound changes to the cultural fabric of the entire Delaware region (Catts and Kellogg 2000).

Two episodes of military activity occurred in New Castle County during the Revolutionary War. During the "Philadelphia Campaign" of 1777-1778, General Howe's troops marched from the Chesapeake, through northern Delaware, en route to battles in southeastern Pennsylvania. After routing a far smaller continental force at the Battle of Cooch's Bridge at Akinstavern (Glasgow), British troops captured and occupied Wilmington for a month (Munroe 1954:92-93). In 1781, General Lafayette reversed this route on his way to face Benedict Arnold in northern Virginia.

The most significant and enduring effect of the Revolutionary War on Delaware was the British blockade of the Delaware and Chesapeake Bays. The blockade forced regional manufacturers and agriculturalists to shift from ocean-based international trade to land-based regional trade in the Philadelphia - Delaware - Baltimore corridor. The emergence of this trade network facilitated the growth and diversification of manufacturing and agricultural goods throughout the region. In northern Delaware, much of this growth was localized to the Piedmont region, where commercial growth surged from 1790 through 1810 (De Cunzo and Catts 1990: 58-59; Shaffer et al. 1988; Welsh 1956).

In the post-war economy, Wilmington emerged as northern Delaware's most important and diverse urban / manufacturing community. Classified by Lemon (1976) as a "processing town," a 1791 report of Wilmington's industry's reported, "12 flour mills, 6 saw mills, 1 paper mill, 1 slitting mill [metal cutting], and 1 snuff mill" (Shaffer et al. 1988; Hancock 1947). At Brandywine Village, paper, powder, and textile mills were added to the existing conglomeration of grain-processing mills, which had appeared during the previous period. Quite different from

earlier “custom mills,” the mills of this period were larger and far more commercialized (Munroe 1954: 28-29).

In contrast to the strides being made in local industry, agriculture was beset by crises. Following a century of extensive farming, farm productivity dropped dramatically during this period. Across New Castle County, eroded and exhausted fields failed to produce significant yields, and as a result, many smaller, marginal farms were abandoned or left fallow. A great many such properties were consolidated into large estates by wealthy landowners.

In the early 1800s, national financial crises worsened prospects for local farmers. Hard-pressed to support themselves even on a subsistence level, a considerable portion of the working agrarian population either moved west to clear new areas or was absorbed into the emergent industrial sector in and around Wilmington (De Cunzo and Catts 1990: 52-53, 59; Herman et al. 1989; Lindstrom 1979: 300; Hancock 1947: 374). While population and agricultural growth leveled in the period between 1810-1830 (Hancock 1947: 374), by the end of the period, some local agriculturalists had made productive in-roads by diversifying crop species. The popularity of this technique increased during the following period (Lindstrom 1978: 20).

D. Industrialization and Capitalization: 1830 to 1880

The years between 1830 and 1880 encompass the most complex and dynamic period of social and economic development in the history of northern Delaware. Improvements in local and regional transportation, the continued expansion and diversification of industrial activities in the Wilmington and Brandywine Valley, the rise of Baltimore as a trading center, and the revolution in agriculture taking place across the region all contributed to a shift away from market-dependence on Philadelphia and a movement towards a more locally-based economy (Lindstrom 1978: 122).

Improvements in regional transportation routes had begun in the first quarter of the century with the completion of a number of interstate turnpikes. One local example was the Wilmington and Great Valley Turnpike, or, modern Route 202. Completed in 1811 this road provided local farmers with a dependable overland route to markets in Wilmington as well as Pennsylvania.

These early road works were the first stage in a campaign of internal transportation improvements that reached its zenith with the completion of the Philadelphia, Wilmington, and Baltimore Railroad in 1839. Competing with the Chesapeake and Delaware Canal, which was begun in 1809 but not completed until 1829, the Philadelphia, Wilmington, and Baltimore Railroad soon handled the bulk of transportation and shipping across the state (Potter 1960; Dare 1856). After its completion, a number of other railroads soon connected northern Delaware to the Pittsburgh area and the Ohio River Valley.

Bolstered by new transportation routes, a large native and immigrant labor pool, and a ready supply of raw materials, northern Delaware’s industries grew and diversified at an unprecedented rate during this period. Having devoting much of its resources to industrial development, by the start of the Civil War, New Castle County boasted a total of 380 manufactures (De Cunzo and Catts 1990: 73; Lindstrom 1978: 122). Local facilities included grain mills, textile mills, paper

mills, powder mills, ironworks, slitting mills, wheel rights, cooperies, and tanneries. In the vicinity of the Brandywine, scattered industrial enclaves evolved into full-fledged company towns. By the 1860's, Wilmington emerged as the state's most densely settled urban region. In addition to its textile mills, the city was also becoming a leading manufacturer of transportation-related equipment such as carriages, railroad cars, and iron ships (Hoffecker 1977).

These dramatic changes in industry were paralleled by important shifts in agricultural practices in the region's hinterland. After abandoning its market reliance on wheat exports to Philadelphia during the first quarter of the century, the farm economy of northern and central Delaware restructured itself around a diversified and locally consumed produce base in the middle of the century. By providing fruits, meat and dairy items to the new urban markets in Wilmington, farmers in New Castle County rebounded from the stagnancy of the past decades. In the Piedmont region, dairy farming supplanted livestock raising as the principal agricultural activity (Bidwell and Falconer 1941: 427).

From a productivity standpoint, the most important change to local agriculture was the adoption of progressive farming techniques. Local farmers incorporated modern farm machinery, fertilization, and drainage measures to significantly increase productivity while simultaneously employing less human labor. These methods also helped to bring marginal regions that had been abandoned during the last period back under cultivation. By the end of the period, New Castle farmers had managed to cultivate over ninety percent of the county's total acreage (De Cunzio and Catts 1990: 67-70).

During this agricultural revolution, roughly half of the farms in New Castle County were worked by tenant laborer families. Tenancy took many forms, but it can be defined generally as the working of a plot of land in exchange for a rent and/or a portion of the yield. Begun in the late-eighteenth century, its practice became pervasive after the crop disasters and economic crises of the previous period concentrated large tracts of land into the hands of wealthy landowners who were either unable, or disinclined, to work the land by themselves (Siders et al. 1991).

While tenancy left no clearly recognizable farm "type," its effects upon the agricultural landscape of the late nineteenth century were profound (Siders et al. 1991: 22). Most notably, tenancy, or rather, the concomitant rise of an agricultural class-system, led to a rebuilding of the local landscape that reflected the ideas, values, and beliefs of the landed elite. By examining the layout of farms of this period, researchers have demonstrated that while the size of the average farm in northern New Castle County shrank to 79 acres during this period, farmhouses and outbuildings virtually doubled in size (Siders et al. 1990; Herman et al. 1989: 146). This was especially true for old "landed" families, whose rebuilt or remodeled hall and parlor homes, stone bank barns, and corn cribs communicated, "the new values of the agricultural reform movement" (Herman et al. 1989: 200-202).

E. Urbanization and Suburbanization: 1880 to 1940

General census figures from the turn of the century show that, for the first time in its history, agriculture ceased to be the predominant occupation in the state. While a number of trade occupations rose in importance during the years between 1870 and 1900, the largest shift

occurred between industry (rising from 23.5% to 31% of the state's work force) and agriculture (declining from 39.5% to 26%). Since the majority of industrial and trade jobs would have been centered around Wilmington, these numbers would have been even more skewed towards industry in New Castle County (De Cunzo and Catts 1990: 77-78).

Nonetheless, agriculture continued to play an important role in the regional economy. The trend towards non-staple crops, perishables, and truck farming initiated in the second quarter of the nineteenth century continued in much of New Castle County, as new transportation routes connected the region to emerging urban areas throughout the northeast. Wilmington's continued growth insured continued demand for dairy products from the Piedmont, allowing this form of agriculture to thrive well into the twentieth century. Agricultural tenancy and share-cropping also held even, with over half of all farms engaged in some form of tenant arrangement at the turn of the century (De Cunzo and Catts 1990: 78-80; Shannon 1945: 418).

While the latter decades of the nineteenth century witnessed growth in New Castle's industries, Wilmington's industrial prominence began to diminish during the early years of the twentieth century. Still one of the most diverse industrial districts in the nation, upper Delaware, "fell behind" industrial sectors in the rest of the nation (Hoffecker 1977). In the early twentieth century, many of Wilmington's firms were purchased by national conglomerates or went bankrupt trying to compete with companies located in the emergent industrial cities of the Midwest (Shaffer et al. 1988: 29). Nonetheless, Wilmington continued to attract a large population of European immigrants, especially from eastern and central European countries (De Cunzo and Catts 1990: 85).

Catts and Kellogg (2000: 18) note that the rise of suburban development outside of Wilmington was initiated in the early decades of the twentieth century. Quite unlike any settlement pattern then seen in the state, the settlement of areas north of Wilmington was initially tied, as it is still today, to the spread of light industries outside of the traditional urban industrial core of the city. Both in and around the city, transportation networks were expanded or rerouted to accommodate increased automobile traffic. While New Castle's population declined almost 13 percent in the years between 1920 and 1960, formerly rural New Castle County saw a population gain of an incredible 455.9 percent (Hoffecker 1977: 60). Indeed, the effects of this shift in settlement pattern continue to be manifest throughout the state up to the present time.

F. History of the J. R. Weldin Property

Originally part of the massive proprietary holding called "Rockland Manor," the 103 acre tract called "Chestnut Hill" was first surveyed in 1680. The exact location of the farm's initial dwelling is not known. However, a 1710 will mentions that the property included a house and cleared land (Taylor et al. 1989: 205). While there is no firm documentation for the location, size or nature of buildings on the property until 1796 (a fire blotter from this date describes a two-story stone house in the vicinity of the existing ruins), existing documents and archaeological evidence suggests that at least a portion of the existing ruins date to as early as 1740.

During much of the farm's eighteenth century occupation, northern Delaware agriculturalists, primarily English and Scotch-Irish settlers, participated in the region's first phase of commercial agriculture. Wheat, the primary crop grown during this period, was shipped to regional mill stations. From these it was sent, via New Castle and Philadelphia merchants, to the West Indies, southern Europe, and other North American Colonies.

Following years of extensive mono-crop farming, agricultural lands in the region became exhausted, and, by the late eighteenth century, local farming appears to have entered into a period of decline. Economic crises in the early years of the nineteenth century combined to force many farmers to abandon their lands and settle elsewhere. At this time, many small farm holdings were bought up by wealthy landowners. Workable farms were tenanted, while more marginal properties were left fallow or put in pasture for livestock (De Cunzo and Catts 1990; Munroe 1978).

These large scale economic events are reflected in the occupation history of Chestnut Hill. Following at least seventy-five years of owner-occupancy, in 1785, the farm was sold to an absentee landowner named John Dickinson, who resided in Philadelphia. Like roughly half of the farms in the state, Chestnut Hill was rented and farmed by a string of tenant farmers during the late eighteenth and early nineteenth centuries (Siders et al. 1991).

Mid-nineteenth century occupations of Chestnut Hill coincided with what some authors have termed a "revolution" in Delaware agriculture. Beginning in the 1830's, local farmers started to incorporate crop-rotation, soil-fertilization, drainage measures, and modern farm machinery in their operations (De Cunzo and Garcia 1992; De Cunzo and Catts 1990). In tandem with this technological progress, the region had also shifted away from its economic dependence on exports to Philadelphia wholesalers. Following the completion of a number of transportation improvements (overland turnpikes in the early nineteenth century, the Chesapeake and Delaware Canal in 1829, and the Philadelphia, Wilmington, and Baltimore Railroad in 1839), local farmers abandoned wheat as their staple crop and began to diversify their produce to include other grains, fruits, dairy products and other perishables. These goods were distributed to regional markets, particularly the emerging urban / industrial centers in Wilmington.

The records relating to Chestnut Hill show evidence of these changes. Census data from 1850 and 1860 indicate that the farm's last tenant, John Bradford, was farming a variety of crop types, including wheat, corn, oats, Irish potatoes and hay. Like other Piedmont farmers of the time, he focused on livestock raising, with some dairy farming as well. Though census data indicate that his dairy operations produced above average yields (Taylor et al. 1989: 208), the farm appears to have been in a state of decline when it was purchased by Jacob R. Weldin in 1862. Much of the arable land was fallow, and the farm's appearance is described by one of his descendants as, "impoverished...dilapidated" (Talley 1899: 178).

Within eight years, Weldin, who had previously split his time between his family's smaller farm adjacent to Chestnut Hill and shad fishing on the Delaware, affected considerable improvements to the farm. By 1870, he had brought a total of 224 acres under cultivation, and by 1881, he appears to have added and improved a number of buildings at the site. When Jacob died in 1892, his estate included "the machinery and other capital required to operate a large dairy farm"

(Taylor et al. 1989: 208). Numerous items in his will, including silver utensils, marble table tops and other luxury goods, books, and a telescope, attest to an above-average lifestyle and some degree of learning.

His son, J. Atwood Weldin, seems to have continued his father's agricultural successes. A member of the local Tallyville Grange (Scharf 1888: 910), he is described as, "one of the most extensive dairy farmers in the Hundred" (Runk 1899: 501). By 1905, the property included a blacksmith/wheelwright shop, two tenant houses, and stables. By the time of his death in 1914, the dairy farm appears to have been thoroughly modernized (Taylor et al. 1989: 208). In his will, J. Atwood Weldin conveyed the property to his son, and the farm appears to have been in a state of decline when it was conveyed to a land development company in 1934.